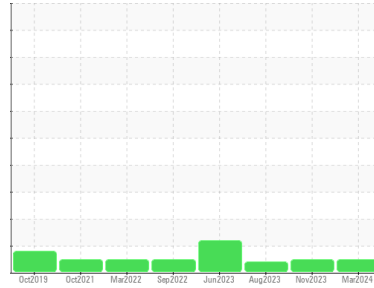




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
9944
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON-E XL 15W40 (--- LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0113258	GFL0097320	GFL0090842
Sample Date	Client Info	06 Mar 2024	14 Nov 2023	22 Aug 2023
Machine Age	hrs	0	0	18685
Oil Age	hrs	19838	192311	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	NEG	NEG
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >120	4	3	2
Chromium	ppm ASTM D5185(m) >20	0	0	0
Nickel	ppm ASTM D5185(m) >5	<1	<1	0
Titanium	ppm ASTM D5185(m) >2	0	0	0
Silver	ppm ASTM D5185(m) >2	0	<1	0
Aluminum	ppm ASTM D5185(m) >20	2	1	<1
Lead	ppm ASTM D5185(m) >40	<1	0	0
Copper	ppm ASTM D5185(m) >330	<1	<1	<1
Tin	ppm ASTM D5185(m) >15	0	0	0
Antimony	ppm ASTM D5185(m)	0	0	<1
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 1	14	107	60
Barium	ppm ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm ASTM D5185(m) 60	50	4	35
Manganese	ppm ASTM D5185(m) 0	0	0	<1
Magnesium	ppm ASTM D5185(m) 1010	786	51	454
Calcium	ppm ASTM D5185(m) 1070	1133	2036	1645
Phosphorus	ppm ASTM D5185(m) 1150	941	905	780
Zinc	ppm ASTM D5185(m) 1270	1110	1079	844
Sulfur	ppm ASTM D5185(m) 2060	2621	2728	2161
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

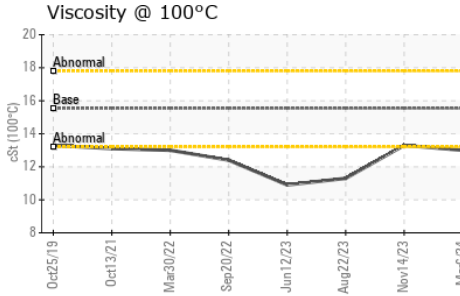
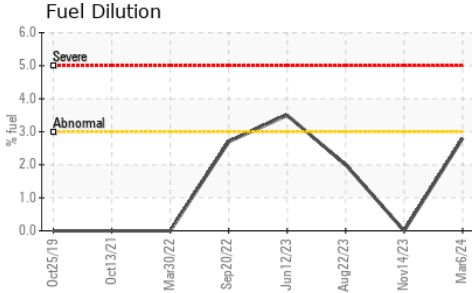
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	2	0	4
Sodium	ppm ASTM D5185(m)	3	5	2
Potassium	ppm ASTM D5185(m) >20	2	4	<1
Fuel	% ASTM D7593* >3.0	2.8	<1.0	2

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >4	0.1	0.1	0
Nitration	Abs/cm ASTM D7624* >20	8.7	8.4	5.4
Sulfation	Abs./1mm ASTM D7415* >30	18.9	22.9	22.7



OIL ANALYSIS REPORT

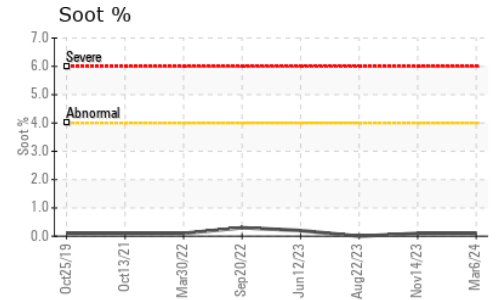
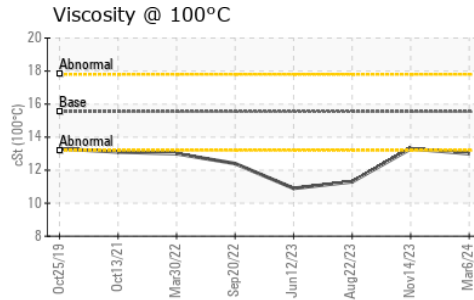
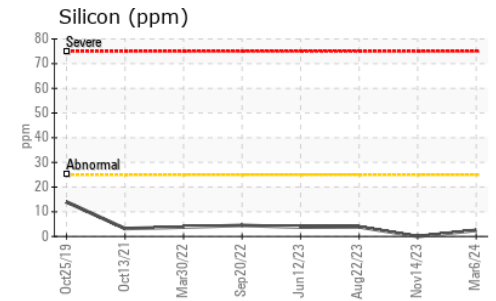
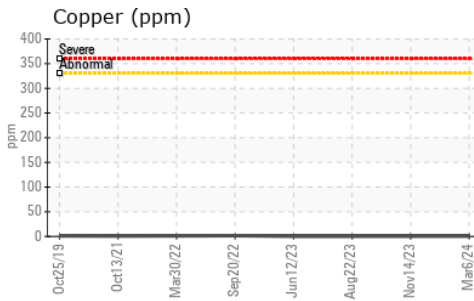
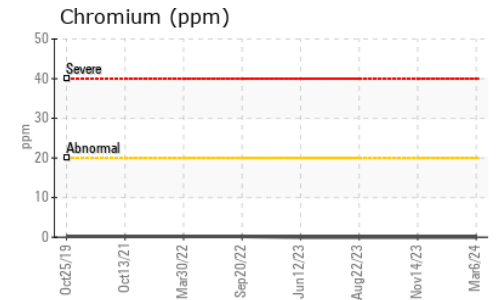
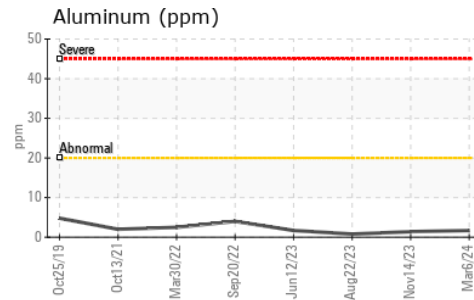
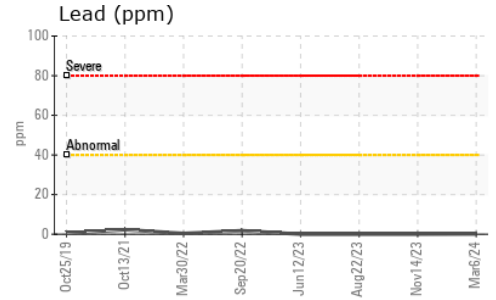
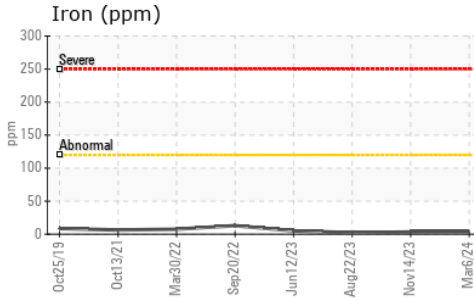


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.7	18.1	19.0

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.54	13.0	13.3	▲ 11.3

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113258
Lab Number : 02620402
Unique Number : 5737512
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 246 - Windsor
 2700 Deziel Dr
 Windsor, ON
 CA N8W 5H8
 Contact: Dave Varga
 dvarga@gflenv.com
 T: (519)944-8009
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.